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March 22, 2004

VIA ELECTRONIC FILING

Marlene H. Dortch, Secretary
Federal Communications Commission
Office of the Secretary
c/o Vistrionix, Inc.
236 Massachusetts Avenue, N.E., Suite 110
Washington, D.C. 20002

Re: WT Docket No. 99-328

Dear Ms. Dortch:

Transmitted herewith for filing on behalf of mobile manufacturers Ericsson Inc, Sony Ericsson Mobile Communications (USA), Inc., Sanyo Electric Co., Ltd., and Samsung Telecommunications America, LLP is an *ex parte* memorandum that responds to certain of the arguments raised by the Wireless Consumers Alliance ("WCA") in its February 9, 2004 *ex parte* filing. The mobile manufacturers have responded to all of WCA's arguments raised in that filing in various pleadings and presentations. The mobile manufacturers submit this paper to present further detail on two specific issues.

In the first section of the paper, the manufacturers show in more detail that three Bureau formal actions – the Nokia Consent Decree, the May 30 Bureau Letter, and the September 24 Bureau Letter – demonstrate that the manufacturers' interpretation of the Second Report and Order is correct. In the second section of the paper, the manufacturers show that implementation of WCA's interpretation of that order would have required substantial modifications to the analog standard, contrary to the FCC's overriding intent that improvements to the call completion method be implemented rapidly without standards changes. The paper also shows that WCA's interpretation would have required other entities, such as base station manufacturers, wireless carriers, and landline carriers to make substantial changes to their systems and processes that were never contemplated or directed by the FCC in the Order. Moreover, these entities would have been included in the FCC's collaborative process designed to facilitate changes in a workable and expeditious manner.

Marlene H. Dortch, Secretary
March 22, 2004
Page 2 of 2

Pursuant to Section 1.1206 of the Commission's rules, this letter is being electronically filed with your office. If you have any questions concerning this submission, please contact the undersigned.

Sincerely,

A handwritten signature in black ink that reads "Elisabeth H. Ross". The signature is written in a cursive, slightly slanted style.

Elisabeth H. Ross
Attorney for Ericsson Inc and Sony Ericsson
Mobile Communications, Inc.

cc: Chairman Michael K. Powell
Commissioner Kathleen Q. Abernathy
Commissioner Michael J. Copps
Commissioner Kevin J. Martin
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MEMORANDUM OF MOBILE MANUFACTURERS

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**The Bureau Actions Demonstrate that the Handset Manufacturers’
Interpretation is Correct.**

I. The Nokia Consent Decree and the Wireless Telecommunications Bureau’s May 30 Letter to Nokia and its September 24 Letter to Ericsson Demonstrate that the Handset Manufacturers’ Interpretation of the 17 Second Condition is Correct

Less than a year ago, the Wireless Telecommunications Bureau, and the Enforcement Bureau working in coordination with the Wireless Telecommunications Bureau, demonstrated their agreement with the Handset Manufacturers’ interpretation of the 17 second condition.¹ Such agreement is reflected in the Consent Decree entered into by the Enforcement Bureau and Nokia in June, 2003.² Such agreement is also evidenced by the Wireless Telecommunications Bureau’s May 30, 2003 letter to Nokia³ and its September 24, 2003 letter to Ericsson.⁴

a. The Nokia Consent Decree Establishes that the Enforcement Bureau and the Wireless Telecommunications Bureau Agree with the Handset Manufacturers’ Interpretation of the 17 Second Condition

In December 2002, Nokia notified the Wireless Telecommunications Bureau that Nokia’s Model 6385 multi-mode handsets may not always meet the 17 second condition. Nokia further informed the Wireless Telecommunications Bureau that to ensure, on a going forward basis, that its Model 6385 handsets comply with the 17 second condition Nokia had (i) developed revised software, (ii) installed such software in all Model 6385 handsets in the U.S. distribution chain, and (iii) provided notification to end users of Model 6385 handsets who had already purchased such handsets that such revised software is available at no cost to the user.

As a result of this matter, the Enforcement Bureau and Nokia entered into the Consent Decree requiring, among other things, Nokia to provide training regarding the 17 second condition to the organizations within the company responsible for software development for multi-mode handsets sold in the U.S.⁵ The Enforcement Bureau required such training to ensure that Nokia would comply with the 17 second condition on a going forward basis.

The Consent Decree provides that the training to be conducted by Nokia “will be done in accordance with a Compliance Program, the principles of which were previously submitted to the Wireless Telecommunications Bureau.”⁶ As confirmed by the following two facts, such principles are unquestionably those set forth in Nokia’s May 27 letter to John Muleta:⁷

¹ The handset manufacturers that filed the Petition for Declaratory Ruling in this matter on October 14, 2003 (“Petition for Declaratory Ruling”) are referred to herein as the “Handset Manufacturers.”

² See “Consent Decree” between the Enforcement Bureau and Nokia Inc. dated June 4, 2003, appended to “In the Matter of Nokia Inc.”, *Order*, DA 03-1897 (Enforcement Bureau, June 5, 2003).

³ See letter from John B. Muleta, Chief, Wireless Telecommunications Bureau, to Robert Pettit, Esquire, dated May 30, 2003 (DA 03-1868) (hereinafter referred to as the “May 30 Bureau Letter”).

⁴ See letter from John B. Muleta, Chief, Wireless Telecommunications Bureau, to Steven Coston dated September 24, 2003 (DA 03-2731) (hereinafter referred to as the “September 24 Bureau Letter”).

⁵ Consent Decree at ¶9(d).

⁶ *Id.*

⁷ Letter from Robert Pettit, Esquire, to John Muleta, dated May 27, 2003 (“May 27 Nokia Letter”), pp.1-2.

- Footnote 7 of the Consent Decree, which is located at the end of the above-referenced excerpt identifying the source of the Compliance Program principles to be employed by Nokia, expressly states that such principles are those set forth in the May 27 Nokia Letter.⁸
- The Compliance Program itself expressly confirms that the “core principles” of the training that Nokia must provide to its organizations relating to the 17 second condition “were presented to the Wireless Telecommunications Bureau in [the May 27 Nokia Letter]. . . .”⁹

Accordingly, the Consent Decree required Nokia to train its employees to comply with the 17 second condition in accordance with the principles set forth in the May 27 Nokia Letter, which principles include Nokia’s understanding of the meaning of the 17 second condition (discussed in the next paragraph below).

It is equally indisputable that the May 27 Nokia Letter expressly provides that a call is considered to be completed “when the handset receives a voice or traffic channel assignment,” and that the handset must seek to make the call on another network only if the handset does not receive a voice or traffic channel assignment within 17 seconds.¹⁰ Therefore, the Consent Decree unquestionably required Nokia to train its employees to design the software to require that the handset make a call on another network only if the handset does not receive a voice or traffic channel assignment within 17 seconds, *i.e.*, in accordance with the principles set forth in the May 27 Nokia Letter.

In addition, Nokia’s software fix of the Model 6385 handsets was performed by Nokia pursuant to, and in reliance upon, its express understanding of the 17 second condition in the May 27 Nokia Letter – *i.e.*, that the handset must seek to make the call on another network only if the handset does not receive a voice or traffic channel assignment within 17 seconds. Accordingly, the lack of any requirement in the Consent Decree for Nokia to take additional steps with regard to its software fix for the Model 6385 handsets further shows the Enforcement Bureau’s recognition that Nokia’s interpretation of the 17 second condition is correct. Otherwise, the Enforcement Bureau certainly would not have allowed Nokia’s software fix to the Model 6385 handsets to be a sufficient method by which to correct those handsets.

The foregoing provides unequivocal proof that the Enforcement Bureau, and the Wireless Telecommunications Bureau with which it would have coordinated prior to agreeing to the Consent Decree, interpreted the 17 second condition in the manner set forth in the May 27 Nokia Letter, which is the Handset Manufacturers’ interpretation as well.

⁸ In identifying the source of the Compliance Program principles, Footnote 7 of the Consent Decree indicates as follows: “See Letter from Robert L. Pettit, Counsel for Nokia, Inc., to John B. Muleta, Chief, Wireless Telecommunications Bureau, Federal Communications Commission (May 27, 2003) (“*Pettit Letter*”).”

⁹ See “Appendix A: Summary of Model 6385 Compliance Program”, appended to the Consent Decree, at n.10.

¹⁰ May 27 Nokia Letter at pp. 1-2.

b. The May 30 Bureau Letter Also Establishes that the Bureau Agrees with the Handset Manufacturers' Interpretation of the 17 Second Condition

As discussed above, the May 27 Nokia Letter expressly states that Nokia considers a call to be completed “when the handset receives a voice or traffic channel assignment,” and that the handset must seek to make the call on another network only if the handset does not receive a voice or traffic channel assignment within 17 seconds. In other words, an “access attempt” is successfully completed when the handset receives a voice or traffic channel assignment, and if the access attempt is not successful within 17 seconds (*i.e.*, if the handset does not receive a voice or traffic channel assignment within 17 seconds), the handset will seek to make the call on another network.

In the May 27 Nokia Letter, Nokia requested confirmation that its understanding of the 17 second condition is accurate, and informed the Wireless Telecommunications Bureau that Nokia was requesting this clarification because it was in the process of preparing a training program intended to focus on these requirements.¹¹ As Nokia stated in its letter, the “requested clarification is needed in order that the training program accurately reflects the requirements of the Nokia Order.”¹²

The May 30 Bureau Letter confirms that Nokia’s understanding of the 17 second condition is accurate. Specifically, that letter states that the 17 second condition means that if the access attempts are not successful within 17 seconds, the handset must attempt to make the call on another network.¹³ The May 30 Bureau Letter further explains how to determine whether an access attempt is unsuccessful: “access attempts are deemed unsuccessful if the handset has not received a voice or traffic channel assignment within 17 seconds.”¹⁴ Thus, the May 30 Bureau Letter clearly confirmed and adopted Nokia’s express understanding of the 17 second condition. In fact, the wording in the May 30 Bureau Letter is almost identical to the wording in the May 27 Nokia Letter that the handset must try another network “if the access attempts on the presently acquired system are not successful within 17 seconds (*i.e.*, if the handset does not have a voice or traffic channel assignment within that time limit).”¹⁵

The language of the Consent Decree provides even further proof that the May 30 Bureau Letter confirmed that Nokia’s interpretation is correct. In the Consent Decree, the Enforcement Bureau stated that the “core principles” of the training that Nokia must provide to its organizations relating to the 17 second condition “were presented to the Wireless Telecommunications Bureau in [Nokia’s May 27 Letter] and **approved** [in the May 30 Bureau Letter]. . . .”¹⁶

It could hardly be any clearer: The May 30 Bureau Letter expressly approved the principles in the May 27 Nokia Letter, and those principles expressly included the fact that the

¹¹ May 27 Nokia Letter at p. 1.

¹² *Id.*

¹³ May 30 Bureau Letter at p. 2.

¹⁴ *Id.*

¹⁵ May 27 Nokia Letter at p. 2; May 30 Bureau Letter at p. 2.

¹⁶ See “Appendix A: Summary of Model 6385 Compliance Program,” appended to the Consent Decree, at n.10 (emphasis added).

handset must seek to make the call on another network only if the handset does not receive a voice or traffic channel assignment within 17 seconds.

c. The September 24 Bureau Letter Also Demonstrates that the Bureau Agrees with the Handset Manufacturers' Interpretation of the 17 Second Condition

On August 13, 2003 Sony Ericsson ("Ericsson") submitted a letter to the Wireless Telecommunications Bureau in which Ericsson requested confirmation that under the FCC Order released on February 11, 2000 approving Ericsson's 911 call processing method, "call completion ... occurs when a voice or traffic channel is assigned, and an access attempt is deemed unsuccessful if no such assignment has occurred within 17 seconds."¹⁷ In that letter, Ericsson further stated that the Wireless Telecommunications Bureau had recently confirmed in its May 30 Bureau Letter that call completion occurs when a voice or traffic channel is assigned.¹⁸ In short, Ericsson was seeking to confirm that call completion with regard to Ericsson would be treated in the same manner.

In the September 24 Bureau Letter, the Wireless Telecommunications Bureau confirmed that Ericsson's understanding is correct as the Bureau explicitly stated that "[s]imilar to Nokia's method, the Bureau approved Ericsson's method with the understanding that access attempts are deemed unsuccessful if the handset has not received a voice or traffic channel assignment within a maximum of 17 seconds and that the access attempts must not exceed 17 seconds . . . before the handset attempts to call on another network."¹⁹ As the foregoing shows, the Wireless Telecommunications Bureau clearly agrees with Ericsson that call completion occurs when a voice or traffic channel is assigned. Moreover, if the Bureau had disagreed with Ericsson's interpretation the Bureau would have stated so, and the Bureau would have characterized as incorrect Ericsson's representation that the Bureau had found – in its May 30 Bureau Letter - that call completion occurs when a voice or traffic channel is assigned. The Bureau, of course, did no such thing for one simple reason: it agrees with Ericsson.

* * * * *

In sum, the Consent Decree, the May 30 Bureau Letter and the September 24 Bureau Letter collectively and clearly demonstrate that the Enforcement Bureau and the Wireless Telecommunications Bureau agree with the Handset Manufacturers' position. In fact, as the foregoing shows, any argument to the contrary that the Bureaus did not agree is not only untenable – it is frivolous.

¹⁷ See Letter from Steven Coston to John Muleta, dated August 13, 2003, pp.1-2 ("August 13 Ericsson Letter").

¹⁸ *Id.* at p. 1.

¹⁹ September 24 Bureau Letter, at p. 2.

II. For Numerous Reasons, There is Absolutely No Merit to Plaintiffs' Argument that the Bureau Actions are Irrelevant

Plaintiffs claim that the Bureau Actions²⁰ are irrelevant because, under Plaintiffs' view, the *Second Report and Order*²¹ is unambiguous and dictates that Plaintiffs' interpretation of the 17 second condition is correct, and therefore the Bureaus cannot reverse that requirement.

Plaintiffs' argument has numerous flaws. First, the Bureaus would not have agreed with the Handset Manufacturers' interpretation of the 17 second condition if the *Second Report and Order* was unambiguous and dictated that Plaintiffs' interpretation of the 17 second condition was correct. As demonstrated above, less than a year ago – and four years after the *Second Report and Order* was released – the Bureaus made it clear in two separate Bureau pronouncements issued under valid delegated authority, and in a separate Consent Decree as well, that their interpretation of the 17 second condition agreed with the Handset Manufacturers' interpretation.

Second, the United States District Court of Illinois (the “U.S. District Court”), which referred this case to the Commission, expressly rejected Plaintiffs' argument that the couple of sentences upon which Plaintiffs rely unambiguously support Plaintiffs' position.²² Rather, the U.S. District Court ruled that those sentences relied upon by Plaintiffs, in fact, “muddy the waters.”²³

Third, for all of the multitude of reasons set forth in the Handset Manufacturers' previous filings, the *Second Report and Order* viewed in its entirety clearly supports the Handset Manufacturers' position. Plaintiffs have not successfully rebutted any of the Handset Manufacturers' arguments, and some of these arguments Plaintiffs have simply chosen to ignore. To say the least, in light of all of those arguments, the *Second Report and Order* does not favor Plaintiffs' interpretation of the 17 second condition, let alone unambiguously support Plaintiffs' interpretation.

Fourth, Plaintiffs have repeatedly changed their position as to how to interpret the 17 second condition. Plaintiffs cannot possibly contend that the *Second Report and Order* is unambiguous and supports Plaintiffs' interpretation when Plaintiffs themselves keep changing their interpretation.

In short, Plaintiffs' position that the Bureau Actions are irrelevant because the *Second Report and Order* unambiguously dictates that their interpretation is correct is undermined by the Bureau Actions, the U.S. District Court's ruling, the *Second Report and Order* read in its entirety, all of the Handset Manufacturers' arguments, and even the Plaintiffs themselves.

²⁰ The Consent Decree, the May 30 Bureau Letter, and the September 24 Bureau Letter are referred to hereinafter as the “Bureau Actions.”

²¹ *In the Matter of Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, CC Docket No. 94-102, *Second Report and Order*, 14 FCC Rcd. 10,954 (Jun. 1999) (hereinafter *Second Report and Order*).

²² See *In re Wireless Telephone 911 Calls Litigation*, MDL 1521, Civil Action No. 03-C-2597, *Memorandum Opinion*, 7-8 (N.D. Ill. Sept. 3, 2003).

²³ *Id.*

III. The Commission Should Find that the Handset Manufacturers' Interpretation is Correct For the Additional Reason that Otherwise the Law Would Violate the Administrative Procedure Act and Be Directly Contrary to Principles of Fundamental Fairness and the Public Interest

The Commission should also find that the Handset Manufacturers' interpretation of the 17 second condition is correct for the additional reason that otherwise the *Second Report and Order* would violate the Administrative Procedure Act ("APA") and be wholly at odds with both principles of fundamental fairness and the public interest. A regulation violates the APA if, among other things, the parties to be subject to the regulation were not provided with sufficient notice of the requirements of the law to comply with the regulation.²⁴ Similarly, a regulation is inconsistent with principles of fundamental fairness and contrary to the public interest where the parties impacted by the law have not been given ample notice of its requirements.

If the Commission were to find that the Handset Manufacturers' interpretation of the 17 second condition is incorrect, the *Second Report and Order* would be unenforceably unclear in violation of the APA and directly contrary to the principles of fundamental fairness and the public interest. In fact, given the Bureau Actions, how can the law possibly be sufficiently clear if it is interpreted against the Handset Manufacturers?

The Wireless Telecommunications Bureau interprets the 17 second condition in the same manner as the Handset Manufacturers. Therefore if the Commission interprets the 17 second condition otherwise now, the 17 second requirement as adopted in the *Second Report and Order* would have been so unclear that even the Wireless Telecommunications Bureau misinterpreted it. That is, if the Wireless Telecommunications Bureau, which is the Bureau responsible for regulating handset manufacturers, interpreting requirements in this area, and granting additional approvals for new methodologies under the law, did not understand what the *Second Report and Order* required, how were the Handset Manufacturers supposed to understand what it required? The Handset Manufacturers cannot be held to have had reasonable notice of the requirements of the *Second Report and Order* if the Wireless Telecommunications Bureau itself did not understand what it required. And, the couple of sentences in the *Second Report and Order* upon which Plaintiffs seek to rely – which sentences the U.S. District Court ruled simply "muddy the waters" – cannot change this inescapable conclusion.

IV. Conclusion

For all of the reasons set forth herein and in the other filings of the Handset Manufacturers, the Commission should interpret the 17 second condition as it is interpreted by the Handset Manufacturers.

²⁴ Petition for Declaratory Ruling at 32-33.

Implementation of WCA's Interpretation Would Have Required Substantial Modifications to the Analog Standard.

The Wireless Consumers Alliance ("WCA") maintains that under the *Second Report and Order*, a mobile phone manufacturer must construct and program handsets so that where a 911 call from a mobile phone operating on its preferred cellular carrier in analog mode cannot be delivered to the landline network within 17 seconds of call placement, the handset will seek to complete the call with the non-preferred carrier.²⁵ In another interpretation, WCA maintains that if the voice transmission has not been received at the base station in 17 seconds, the handset should seek to complete the call with the non-preferred carrier.²⁶ WCA claims that its interpretations would not have necessitated any change to the Analog Standard that was in effect at the time the *Second Report and Order* was adopted.²⁷

In fact, implementation of WCA's different interpretations of the 17-second rule would have required substantial changes to the Analog Cellular Compatibility Standard. Therefore, for this reason as well,²⁸ WCA's interpretations are not consistent with the FCC's intent in adopting the rule.

I. The Analog Standard Considers a Call "Complete" when the Mobile Attains a Voice Channel and Reaches Conversation State.

TIA/EIA 553-A (the "Standard") establishes the requirements for handling analog mobile phone transmissions.²⁹ The Standard contains basic signaling compatibility requirements for handsets to enable a mobile station to signal a base station, when correctly followed.

In simple lay terms, the mobile station initiates the call by attempting to access a control channel to request call setup and a voice channel assignment. Next, the base station establishes a voice channel for the mobile. Then, the base station assigns a voice channel to the mobile. The mobile tunes to its assigned voice channel so that it may transmit the call.

Successful assignment of a voice channel indicates attainment of conversation state by the mobile station.³⁰ Upon reaching conversation state, no other processes associated with call

²⁵ See Ex Parte Memorandum to Secretary Dortch from Wireless Consumers Alliance, at p. 1 (Feb. 9, 2004) (hereinafter "Feb. 9, 2004 Ex Parte"). WCA has vacillated as to its interpretation of the rule over the course of the litigation and this case.

²⁶ Feb. 9, 2004 Ex Parte, Exhibit A, p. 2. WCA attempts to harmonize these two different interpretations by claiming the base station's receipt of the voice transmission is synonymous with the call being delivered to the landline carrier. This is not true, since there are several significant steps in the call completion process between receipt of the call at the base station and the call being delivered to the landline carrier. See III, below. Consequently, there are a number of reasons why a call that is received at the base station may not make it to the landline carrier. See fn. 34.

²⁷ See Feb. 9, 2004 Ex Parte, Exhibit D, p. 1.

²⁸ The mobile phone manufacturers have provided a number of reasons demonstrating that WCA's interpretations are wrong.

²⁹ ANSI TIA/EIA 553-A, *Recommended Minimum Standards for Analog Mobile / Base Station Compatibility* (hereinafter the "Standard").

³⁰ See *id.* at 44-59 (See e.g. 2.6.4.4 Conversation Task).

setup are initiated or responded to by the mobile, as the TIA/EIA 553-A Standard considers the call technically complete from the mobile point of view.³¹

II. The TIA Bulletin Did Not Change the Call Setup Procedure, but Rather Required Retry on the Non-Preferred Carrier for 911 Calls

TIA issued a technical services bulletin, TSB119, to implement the *Second Report and Order*.³² TSB119 simply established a call processing mode specifically for emergency calls. Under these procedures, if the mobile determined that an emergency call could not be completed (i.e., did not reach conversation state) after 17 seconds, the mobile would automatically retry the call setup on the non-preferred carrier.³³ Thus, rather than retrying on its own system after 17 seconds, the mobile would attempt to complete the call on the non-preferred carrier—this was the extent of the modification to the Standard imposed by TSB119. Consistent with the *Second Report and Order*, the bulletin did not add any new voice quality or signal monitoring requirements.

III. WCA's Interpretations Ignore the Steps That Other Entities Take to Transmit the Call to the Landline Network

After the handset follows the process described on page 1 to “launch” a call to a base station, other entities in the wireless network system follow a number of additional steps to transmit the call to the landline network. In general terms, after the mobile opens the audio path and transmits the call to the base station:

- The base station sees that the mobile has made a transmission on the assigned voice channel and it tunes to that channel. The base station then seeks to determine that the radio links (both to and from the mobile) have been established.
- The base station initiates the dialing sequence to seek to send the call through to the wireless carrier's switch (“Mobile Switching Center” or “MSC”) with a flag identifying the call as an emergency services call.
- The wireless carrier seeks to route the flagged call to the landline carrier for delivery to the Emergency Services Landline Network.³⁴

³¹ See *id.*

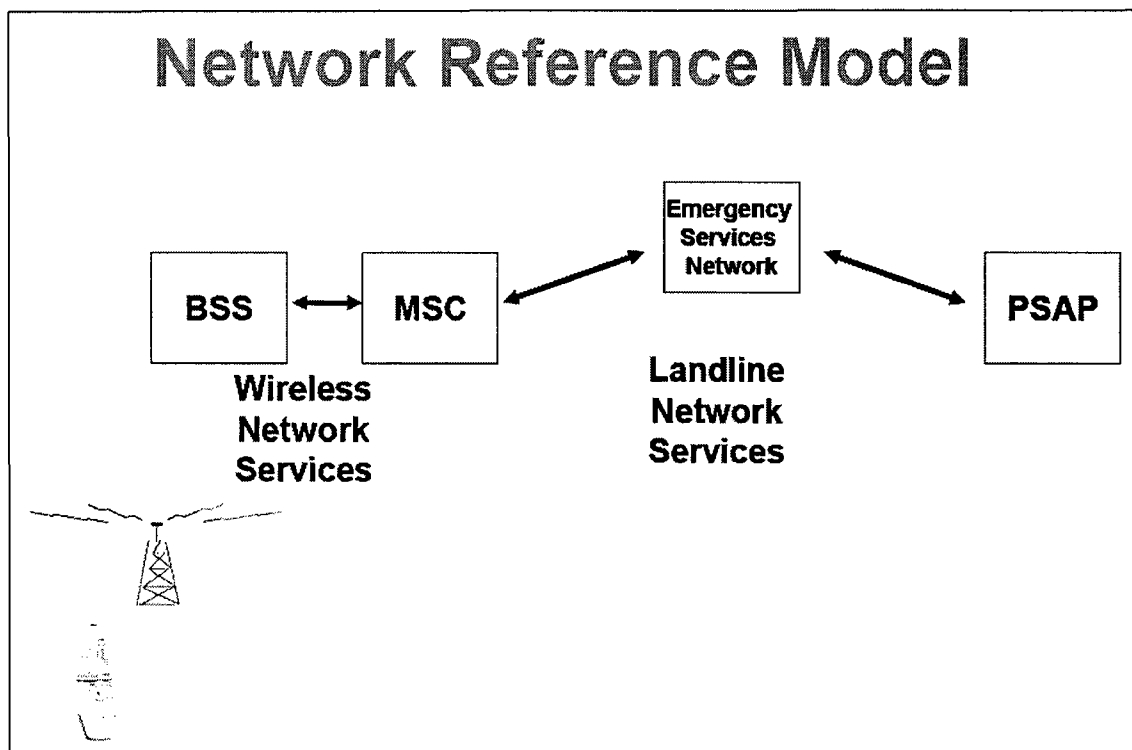
³² See TIA/EIA Telecommunications Systems Bulletin, *Enhanced System Access Procedures for E 911 Calls for Analog Cellular*, TSB119 (Oct. 2000) (hereinafter TSB119).

³³ See *id.* 11 (2.6.3.12 Serving System Determination Task).

³⁴ WCA is wrong that “once a handset transmission is received at the base station, it is instantaneously delivered to the landline carrier.” (Feb. 9, 2004 Ex Parte, Exh. A, p. 2, fn. 1). Delivery to the landline carrier following receipt at the base station is certainly not absolute. In fact, there are a number of reasons why a call that makes it to the base station will not necessarily make it to the wireless switch, or that makes it to the wireless switch, will not make it to the landline carrier. For example, the wireless switch may be at full capacity or there may be an equipment failure somewhere between the base station and the wireless switch. It also is possible that there could be an equipment failure somewhere between the wireless switch and the wireline switch, or a capacity issue at the wireline switch, that prevents a call from reaching the landline carrier.

- The Emergency Services Landline Network can then determine where the call should be routed and sends this routing information to the wireless carrier's switch.
- The wireless carrier's switch routes the call to the PSAP designated by the Emergency Services Landline Network.

The Network Reference Model below describes the steps that the call takes after the mobile obtains a voice channel.



Therefore, as shown in the diagram above, there are a number of additional entities within the network that the FCC would need to include in the process and mandate to take action to ensure that the call reached the entity in a defined time and that the mobile was informed of that status to provide a complete "closed-loop" process. For example, under WCA's interpretation that the call must make it to the base station in 17 seconds, the FCC would have to impose requirements on the base station manufacturer and wireless carrier. Alternatively, under WCA's interpretation that the call must make it to the landline carrier in 17 seconds, these two entities, plus the landline carrier, would have to be included and mandated to take action. WCA completely omits identifying and assigning these entities' responsibilities in its interpretations.

IV. WCA's Interpretations Would Have Required Substantial Changes to the Analog Standard

The FCC would have ordered substantial changes in the Analog Standard and directed compliance by other network entities if it intended for mobile phone manufacturers to construct and program their handsets to know, if a 911 call was not delivered to the landline network (or

the base station) within 17 seconds after the call was placed, the handset would seek to complete the call with the non-preferred carrier (WCA's interpretation on February 9, 2004).³⁵ The following sections describe why the mobile cannot take this action without the assistance of the base station or other entities.

a. The Mobile Would Need to be Told that the Call Had Not Reached the Landline Carrier in 17 Seconds.

First, the mobile handset only knows what it is told. If the handset was required to set a timer to events which were outside the scope of tasks it performed, i.e., setting a timer when the base station determines that both radio links have been established, a timer when the base station transmitted the call to the wireless carrier network, and/or a timer when the wireless network system handed the call off to the landline network system, the base station equipment manufacturers, wireless network carriers, landline network equipment systems, and landline carriers would be required to validate that the task was or was not accomplished in the time allotted. Also, each would have to send a message back to the handset to tell it that the task either was or was not accomplished and what the follow-on process should consider.

Therefore, WCA's interpretations of the FCC's *Second Report and Order* are clearly wrong. According to WCA, the mobile would start its clock when the caller hit "send" on the phone. It would then count down seventeen seconds until the base station successfully received the signal and transmitted the call to the landline carrier. WCA starts the timer at an event on a mobile action, the user pressing "send," and ends the timer at an event that only the base station knows, that the base station has received a voice transmission and that the radio links are established.³⁶ Since WCA's event to end the timer is a base station only event, the only way for the mobile to know this has happened (and when it happened) is for the base station to tell the mobile. However, there are no protocols, signaling, messaging flags, or time frame coordinator requirements in the Standard defined to do this. Moreover, no one entity in the system has all the information to keep a "master clock" that can time tasks performed by the mobile, the base station, the wireless carrier, the wireline carrier, and the PSAP (or any combination of these entities) system-wide and determine call completion success within a defined time.

b. The FCC Never Required the Base Station Manufacturer to Set a Timer that was Synchronized with the Mobile's Timer

WCA has attempted to twist the plain language of the Standard to support its claim that the base station's existing fade timer capability is sufficient to implement its interpretation of call completion. The Standard does not require that the base station timer be of a particular duration or be sequenced or tied to the mobile timer in any way. In the standard, the base station timer's specifications section is "Reserved." "Reserved" simply means that there have been no specifications in that area. It does not mean, as WCA has asserted without foundation, that the identical mobile specifications are incorporated for base stations. Consequently, if the Standard intended to tie the two provisions directly, it would have used mandatory language, such as

³⁵ See Feb. 9, 2004 Ex Parte, p. 2.

³⁶ Additionally, if the issue, ultimately, is whether the call has been received at the landline carrier under WCA's interpretation, then the landline carrier would also need to transmit information that it had received in the call.

“incorporated by reference,” or included specifications applicable to the base station timer. Similarly, the FCC would have imposed requirements that the base station and mobile timers measure seventeen seconds, jointly or in tandem. Without such specific requirements in the Standard, base station manufacturers are allowed full flexibility on use of timers. They can design a timer to meet the wireless carrier’s needs, without any constraints contained in the Standards.

c. The FCC Never Told Other Wireless Network Entities to Make Changes in Their Equipment and Did Not Include Them in the Collaborative Process.

If the FCC had intended that other equipment manufacturers, including the base station equipment manufacturers, the wireless network switches, and the landline carrier each be responsible for timers, for validating and interpreting voice quality, and for sending message flags and feedback to the mobile, these entities would have been part of the FCC review process with the same commitment as mobile manufacturers. Certainly, these network system equipment manufacturers and carriers would have educated FCC Staff on the detailed technical aspects of their roles and capabilities of their network equipment based upon existing and current standards for their call completion process. They would also have given realistic feedback on what changes were needed to the Standard and what was doable within the short implementation period that the FCC defined. Moreover, the FCC would have had to impose mandates directly on these other entities so that they would be legally obligated to measure and report back to the mobile station on their part of the process.

V. Conclusion

For these reasons, WCA’s interpretations are clearly wrong. In 1999 the FCC needed a solution that could be implemented quickly, without significant changes to the Standard. The FCC recognized that analog phones were short-lived, yet needed some quick changes to improve public safety.

To make WCA’s interpretation of the *Second Report and Order* work, the base station, the wireless carrier, and the landline carrier would have to tell the mobile that they had completed their part of the call process. Additionally, these entities would have required added timers for their process tasks, and coordinated their timers and keyed them to the 17-second requirement. The addition of this equipment, requirements for timed coordination, and adoption of signaling and messaging protocols clearly would have required extensive changes in the Standard.

The mobile manufacturers made substantial progress in ensuring that the mobile phone would toggle to the non-preferred carrier if the mobile did not attain a voice channel in 17 seconds. Manufacturers were able to accomplish these changes within the basic structure of the existing standard based on the tasks of which the mobile had knowledge. The FCC achieved a practical solution that could be implemented quickly and would substantially improve wireless public safety. Wireless manufacturers accomplished the FCC’s goals and objectives.